FIG. 1a

Passive Motion Platform - Top Elevation
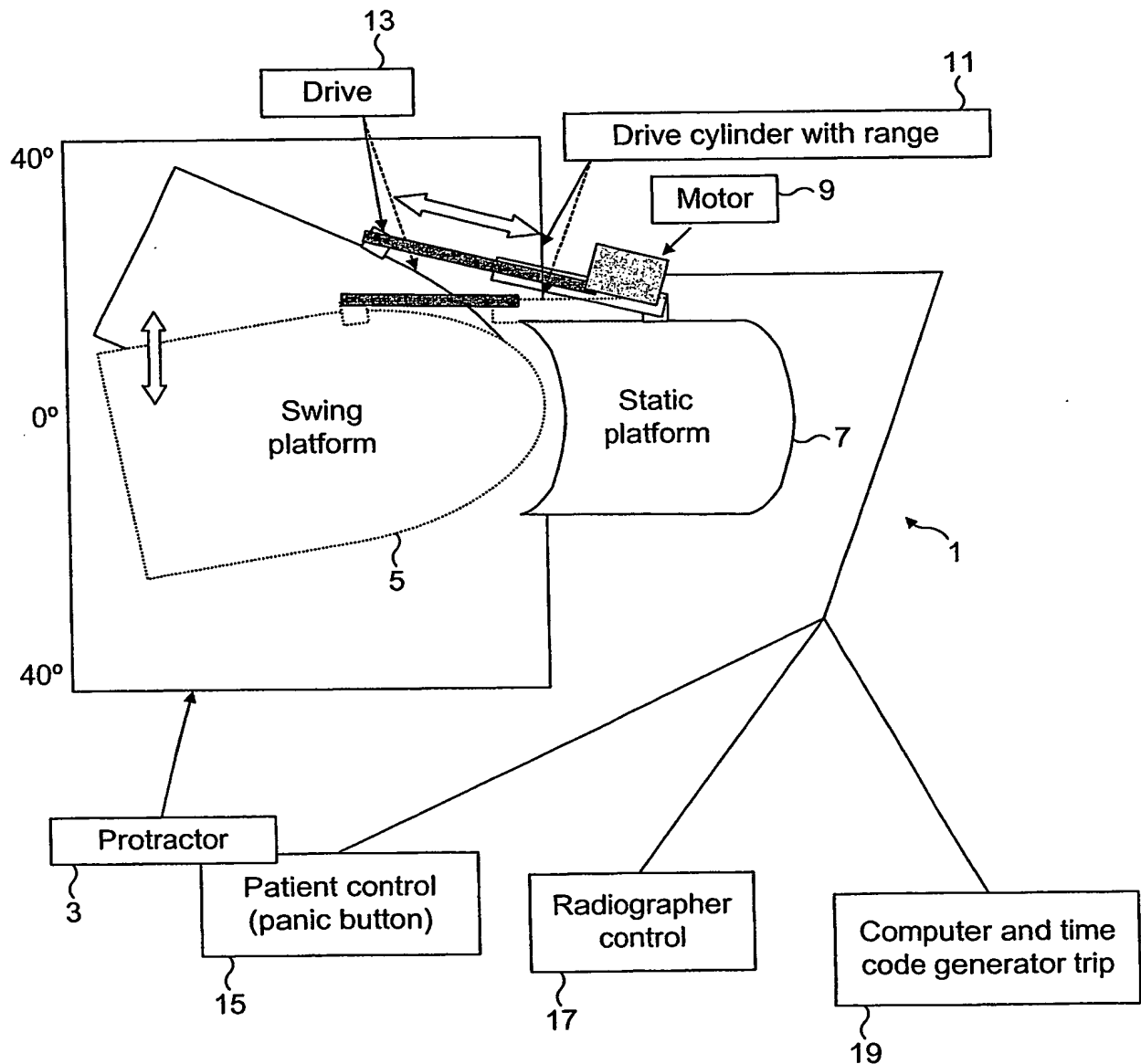
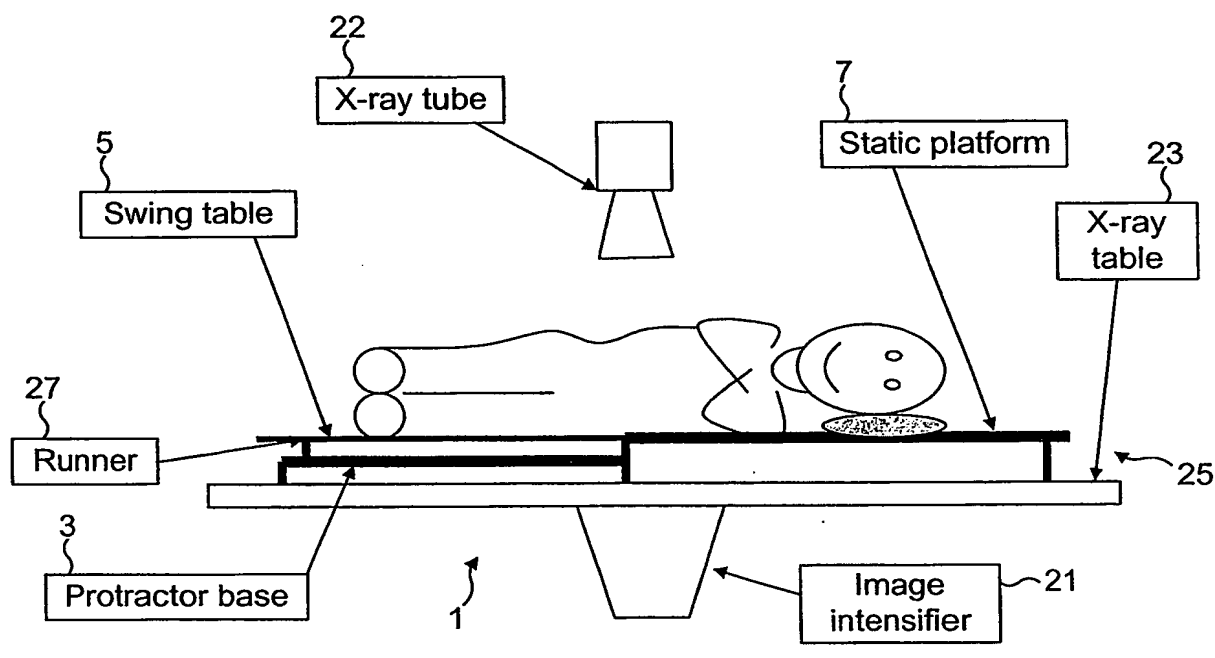# FIG. 1b

Passive Motion Platform - Side Elevation

22

X-ray tube

5

Swing table

7

Static platform

23

X-ray table

27

Runner

3

Protractor base

1

21

Image intensifier

25

FIG. 2a
Linked Components of the System

Lead glass screen

Swing table motor

X-ray machine control linkages

Swing table control linkage

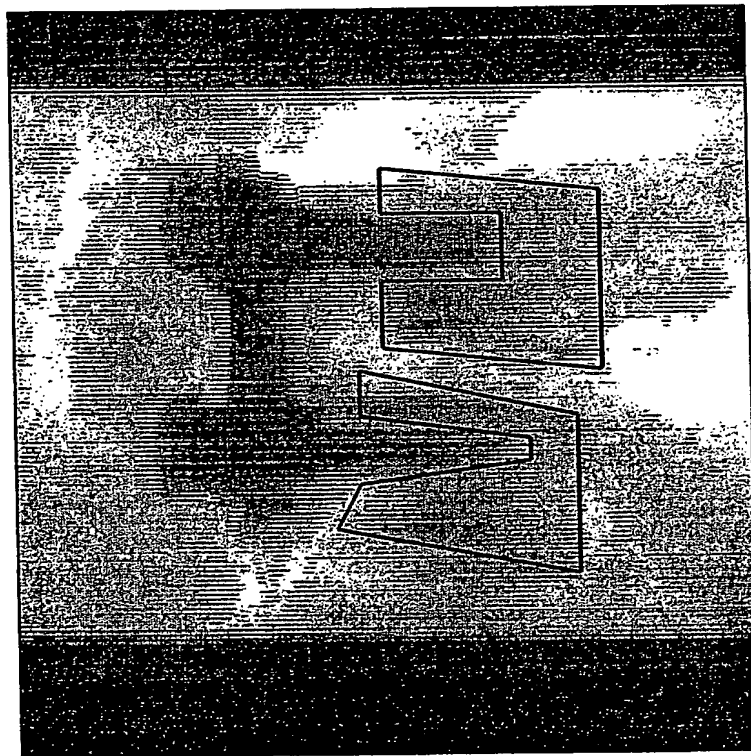Intensifier output linkages

Image

Image display

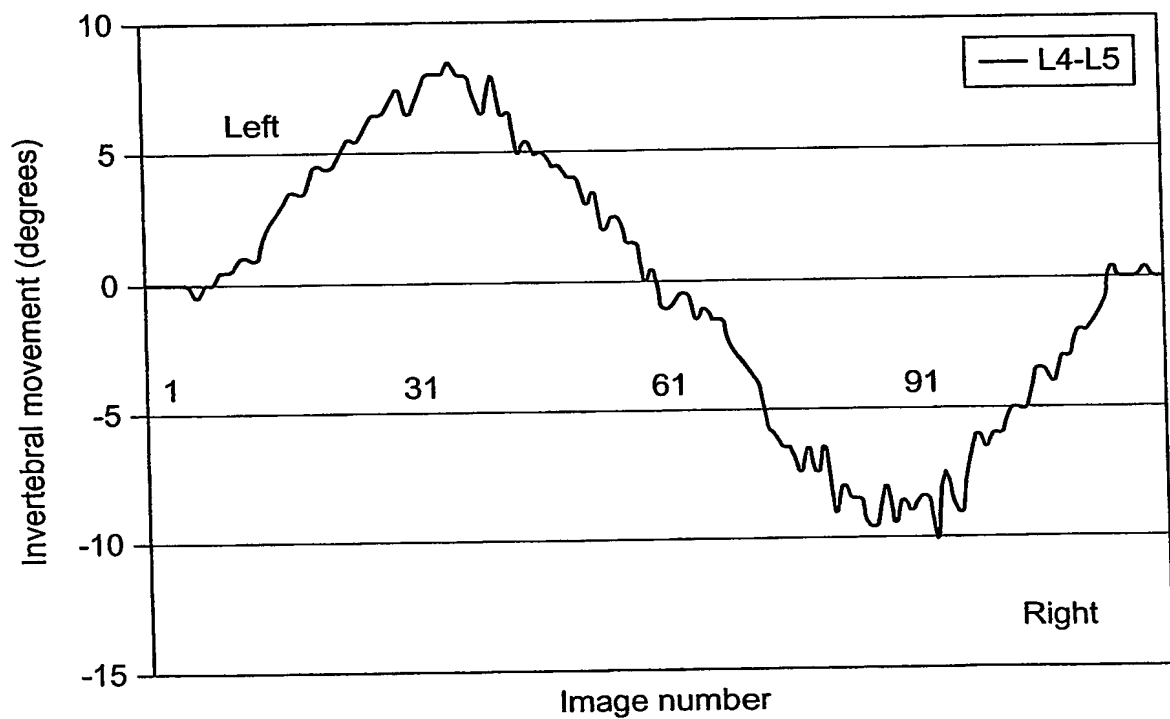X-ray machine console

Computer

Time code generator
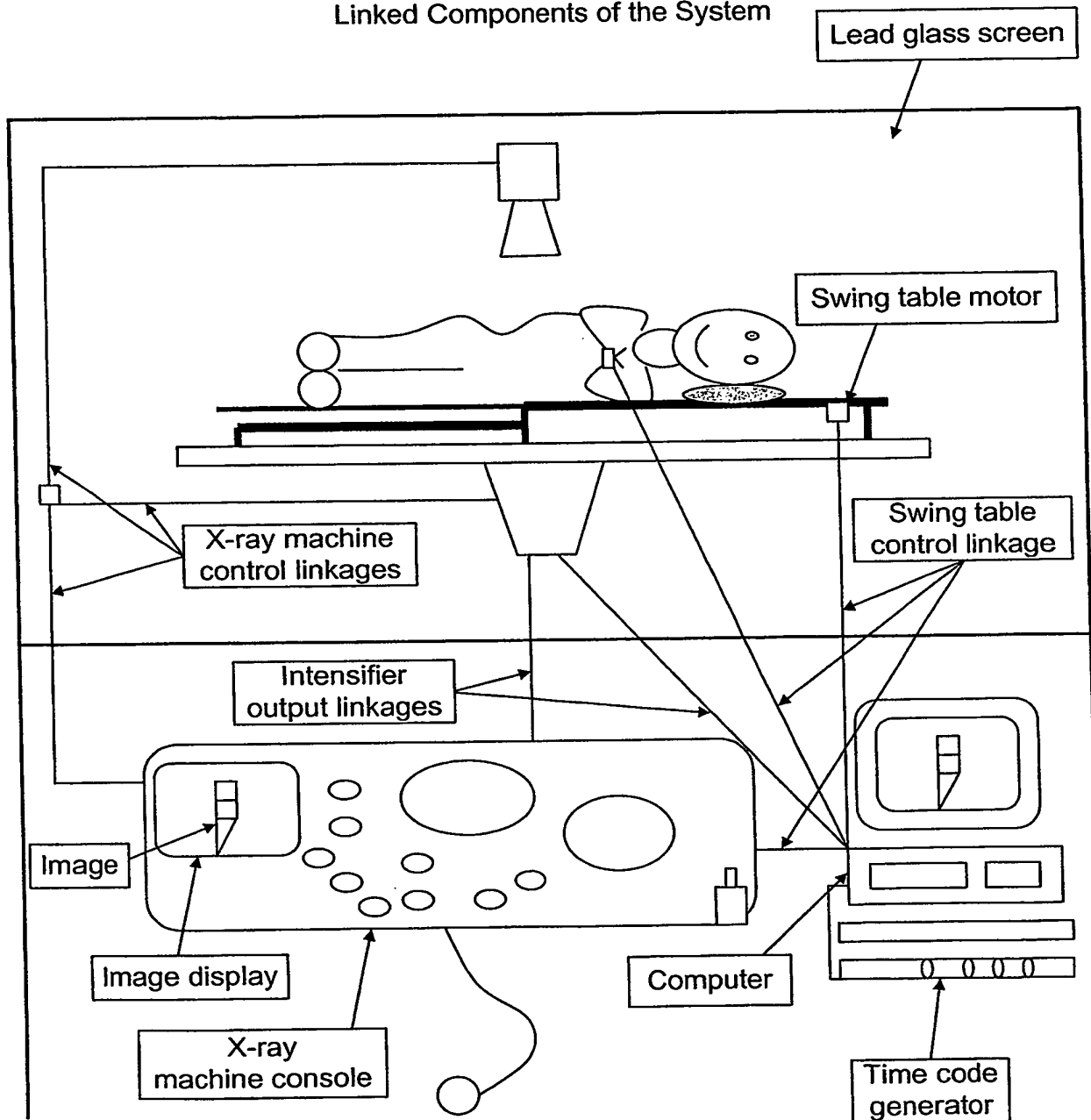
FIG. 2b

X-ray image of a vertebra with implated surgical
screws and rods with outline of templates denoting
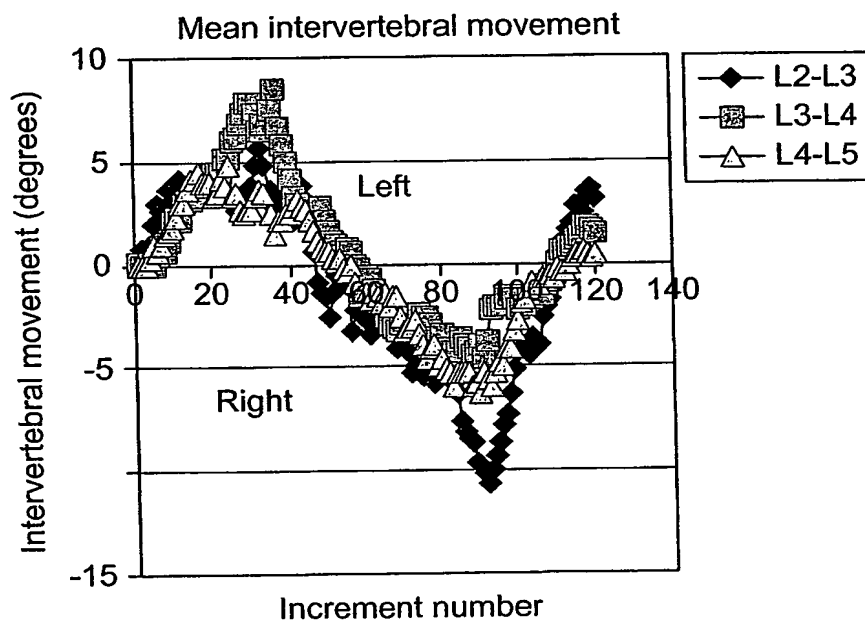areas of bone image enclosed for automatic tracking.

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FIG. 3a

Example of automated tracking results: An automated registration
of one intervertebral joint through a full sidebending range

FIG. 3b

Example of automated tracking results: Average of ten automated registrations of a series of mobile intervertebral loins through a full sidebemding range for 4 vertebrae simultaneously
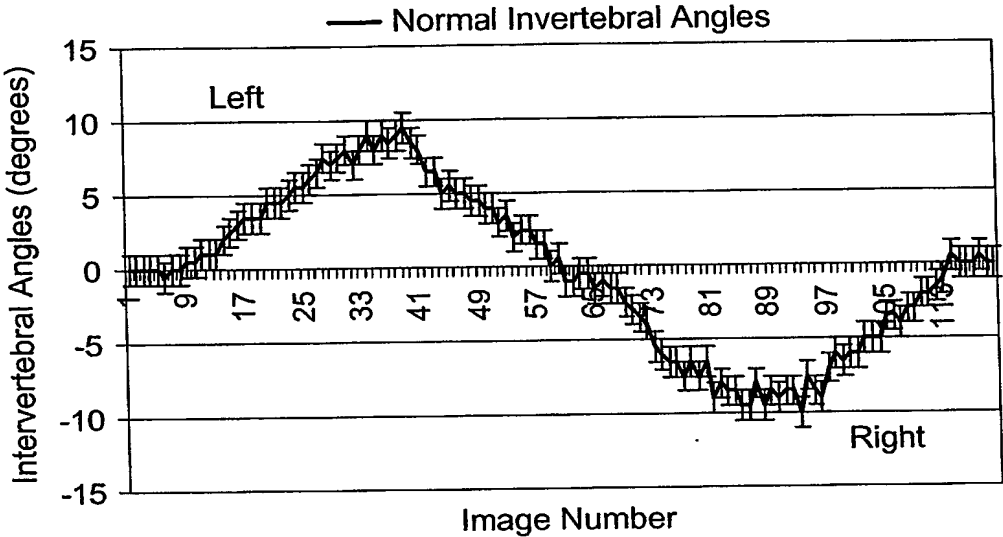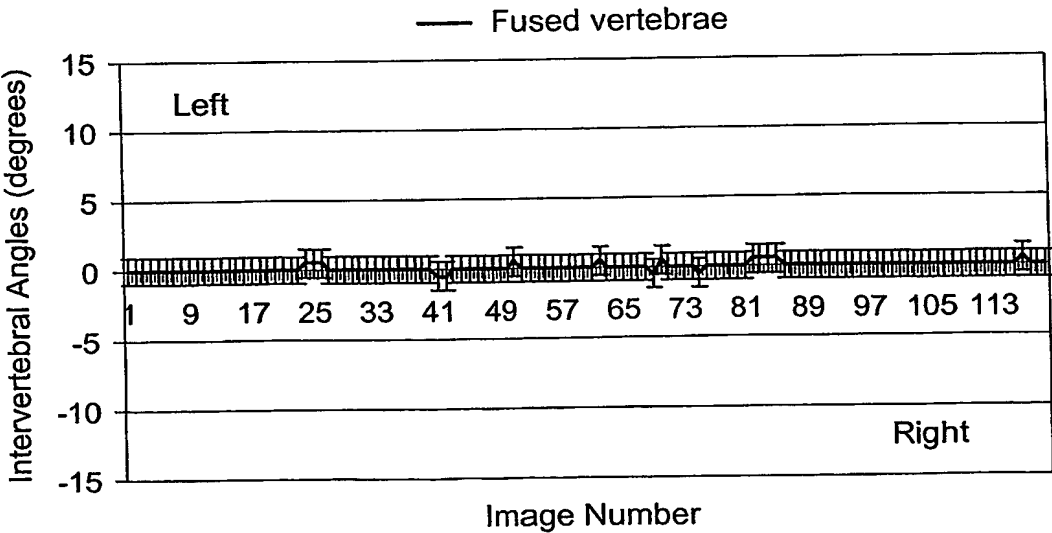

Mean intervertebral movement

FIG. 4

— Normal Invertebral Angles

FIG. 5

— Fused vertebrae

FIG. 6

FIG. 7